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Authors of papers intended for publication in Food Technology should request from the Editor's office a copy of a booklet, titled "Suggestions to Authors," and see that their papers are in the form specified therein before they are sent to the editor.

The Institute of Food Technologists assumes no responsibility for statements in contributed articles appearing in Food Technology. Editorials present only opinions of the writers and do not necessarily reflect policies of the Institute of Food Technologists.

Selected Abstracts

ANALYTICAL METHODS

26J. Determination of reduced iron in vitamin enrichment mixtures.

NEUSS, J. D., AND FREDIANI, H. A. *Cereal Chem., 26,* 339-41 (1949).

When iron is present as reduced iron (iron by hydrogen) in vitamin enrichment mixtures it may be determined readily by magnetic separation and direct weighing. Such method provides a rapid and precise method for determining the added iron content and precludes the inclusion of other iron compounds that may be present in the other components of the mixture.

27J. The iodine content of fruits and vegetables.

CAMPBELL, R. B., AND YOUNG, E. G. *Can. J. Res., 27F,* 301-6 (1949).

The content of iodine in fruits and vegetables from the eastern Maritime Provinces has been determined by a modified Pfeiffer procedure. The sensitivity of the method was found to be about 1μgm., with an accuracy of approximately ± 5%. The results obtained were near the mean values previously reported. The iodine content of potatoes varied from about 50 to 400 p.p.b. with a mean value of 153 p.p.b.; that of turnips from 50 to 90; several samples of cabbage, peas and pumpkin showed no trace of iodine present. Most specimens of fruit had no iodine, or only a trace, with the exception of plums which contained 113 p.p.b. No correlation of iodine content with variety or site or origin was evident.

28J. Procedures for the appraisal of the toxicity of chemicals in foods.

LEHMAN, A. J., et al. *Food Drug Cosmetic Law Quart., 4,* 412-34 (1949).

The objective of this paper is to present a discussion of the technics and procedures used in the Division of Pharmacology in attempting to solve the various phases of the problem. These phases may be listed as (1) chemistry, (2) acute toxicity, and mechanism and site of action, (3) allergic responses, (4) subacute and chronic toxicity, reproduction and paired feeding studies, (5) biochemistry, and (6) pathology.

BIOLOGICAL SCIENCES

BIOCHEMISTRY

29J. The copper-catalyzed oxidation of ascorbic acid in fruit and vegetable suspensions.

HUELIN, F. E., AND STEPHENS, I. M. *Aust. F. Sci. Res. B, 1,* 50 (1948); *Food Sci. Abst., 21,* 30 (1949).

The copper-catalyzed oxidation of ascorbic acid was studied in phthalate and phosphate buffers. The rate increased with concentration of copper up to 10 p.p.m., and with increasing pH, up to 6. Oxalic, malic, citric and tannic acids, sulphur dioxide, albumen, cysteine and particularly, thiourea reduced catalysis by copper. Most fruit and vegetable tissues were found to contain substances which reduced the copper-catalyzed oxidation of ascorbic acid onion tissue giving outstanding protection, owing probably to the volatile sulphur compounds associated with pungency. Even in fruit and vegetable suspensions containing protective substances, the effect of low concentrations of copper was still quite appreciable, particularly in the case of tomato products.

30J. The enzymic synthesis and degradation of starch. Part IV. The purification and storage of the Q-enzyme of the potato.

BARKER, S. A., BOURNE, E. J., AND PEAT, S. *J. Chem. Soc.,* 1705-11 (1949).

An improved method is described for the isolation and purification of the Q-enzyme of potatoes. The Q-enzyme prepared by this method effects almost a 90% diminution of the absorption value of amylose with the concomitant liberation of only 2% (as maltose) of reducing end-groups. The preparation is free from α- and β-amylase, maltase, and fatty acids. The amylose-degrading action of Q-enzyme functions at optima of pH 7.0 and temperature 21° ± 1°. Although Q-enzyme is unstable in aqueous solution, it can be stored for long periods without appreciable loss in activity when it is freeze-dried.

31J. The enzymic synthesis and degradation of starch. Part V. The action of Q-enzyme on starch and its components.

BARKER, S. A., BOURNE, E. J., AND PEAT, S. *J. Chem. Soc.,* 1712-17, July, 1949.

The end-product of the action of Q-enzyme on amylose is a red-staining polysaccharide, having a ramified structure and an average chain-length less than that of amylose. This polysaccharide, like that produced from potato starch by Q-enzyme, is indistinguishable from natural amylopectin. The hypothesis of Bourne and Peat (*J. Chem. Soc.,* 1945, 877) that Q-enzyme catalyses the conversion of amylose into amylopectin is substantiated.

32J. Separation of enzymes on the filter paper chromatopile.

MITCHELL, H. K., GORDON, M., AND HASKINS, F. A. *J. Biol. Chem., 180,* 1071-6 (1949).

It has been established that considerable enzyme resolution can be attained by use of the filter paper chromatopile. Variations in salt concentrations and pH are shown to have a great influence on the movement of at least two enzymes in the pile. These variations with the many obvious ones that are yet to be investigated may provide some new criteria for protein homogeneity.

33J. Cysteine protection against X-irradiation.

PATT, H. M., et al. *Science, 110,* 213-14 (1949).

Administration of cysteine, but not cystine, to rats greatly diminished the toxicity of X-irradiation in the nearly completely lethal range. It is proposed that this ameliorating influence resides in the protection against oxidation of certain cell constituents provided by the cysteine. Oxidizing compounds are known to be formed by the action of X-irradiation on water.

34J. Correlation of browning, fluorescence, and amino nitrogen change with destruction of methionine by autoclaving with glucose.

GRAHAM, W. D., PENG, Y. H., AND MCGINNIS, J. *Science, 110,* 217-18 (1949).

A brief paper discussing the work along similar lines by others. The conclusion arrived at is that no marked destruction or changes in brown color, fluorescence, and amino nitrogen was brought about by autoclaving methionine in an 8% glucose solution.

35J. The reaction between milk protein and reducing sugar in the "dry" state.

LEA, C. H. *J. Dairy Res., 15,* 369 (1948); *Food Sci. Abst., 21,* 95 No. 342 (1949).

A progressive loss of free amino-nitrogen, and an approximate corresponding increase in combined sugar, have been found to occur in the undialyzable (protein) fraction of separated milk powder of high moisture content during storage. To investigate whether this is due to a reaction between amino acids and reducing sugars, or whether denaturation of the protein is responsible, "dry" dialyzed milk protein was stored for 6 months at 37° C. and 55% r.h. alone and in presence of small proportions of glucose, of high proportions of lactose and sucrose, and of mixtures of these sugars. The reducing sugar combined with free amino groups of the protein, sucrose did not. The reaction did not proceed to completion, and only when the sugar-amino reaction occurred did discoloration ensue. Glucose reacted with the protein more rapidly than lactose, and the complex formed became discolored and insoluble in water more rapidly. Sucrose and lactose, particularly the latter, greatly delayed the onset of glucose-induced insolubility, but did not prevent discoloration. The protein alone did not discolor, but became insoluble in cold, but not in hot, water after prolonged storage. This change was prevented by sucrose; but the behavior of lactose was variable.

(Continued on page 8 following technical papers)

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Leonard J. Vinson, biochemist at Armour Research Foundation of Illinois Institute of Technology, claims a record for the rapid solution of a research problem. He solved "The Case of the Tough Apricots" in 15 minutes.

The owner of a Chicago food products corporation one morning recently called the Foundation, a nonprofit organization which does research work for industrial concerns. Here was his problem: The company had tough apricots, and he'd lose the whole amount he had purchased unless they could be softened quickly.

In making preserves to sell to the baking industry, the company soaks apricots for 24 hours. The fruit is thus softened and easily macerated, then cooked with sugar and other ingredients to make the preserves. A large quantity of apricots had been bought which had an excellent color but refused to soften in soaking periods as long as 72 hours. The company wanted the color, but couldn't afford the toughness of the fruit—too long a softening period.

"Come on out and talk to us," Vinson told the preserve maker. "And bring some of the apricots."

When the man and his sample apricots arrived, Vinson took him to the biochemical laboratory. After a few minutes conversation the scientist had an inspiration. He plunged the apricots into an enzyme preparation which softened them in less than a quarter hour.

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ALGINATES FOR THE FOOD INDUSTRY

Abstract by Roy C. Stevens of Scottish Seaweed Industry. Anonymous article published in *Food Manufacture* **24**, 357 (1949).

The Scottish Seaweed Research Association is attempting to determine whether a major industry can be established in the production of alginate products. To the present time, employment has been on a periodic or limited scale.

The major problem confronting the industry is the development of an economical method of harvesting the weed. No one method can be used in every instance because the varieties of weed in Scotland are both littoral and sub-littoral and are heavier than water. The sub-littoral weed is the more abundant type and the more difficult to harvest. It is on this type that the current experimental work is being carried on.

Various types of mechanical harvesters have been attempted. Those employing rotary discs have shown a tendency toward fouling. The most successful type to date has been one using special grapnels. These may be continuous or discontinuous.

The discontinuous system involves the use of a specially adapted vessel with two special grapnels mounted on two davits operated by a winch. The grapnels are played alternately, one up one down, from opposite sides of the vessel.

The continuous grapnel system is a development of the above system incorporating a conveyor belt in cooperation with a series of specially designed hooks on grapnels. "The rear end of the conveyor is carried over the sea bed on supporting wheels, while the sixteen special hooks travel around the metal framework over which the designers have used a covering of wire mesh. The hooks are arranged to travel faster than the motive unit and are designed to prevent anchoring. The net depresses the weed, and the hooks gather it and convey it to the surface where it is delivered into the hold."

At the present time, the weed is collected by the villagers and air-dried before being sold to the processing company. It is then thoroughly dried by a hot air blast and ground into a coarse powder. It is stored in this form and will remain stable for up to two years, permitting the building up of reserves.

After the powdered weed has been graded, examined and approved, it is treated with alkaline liquors to give the crude extract containing the alginates. This extract is purified and converted to alginic acid from which the various alginate salts are derived.

It is estimated that the industry can be developed to the extent that it will have an annual turnover value of 15 million pounds.—*Commercial Fisheries Abstracts*, November 1949.

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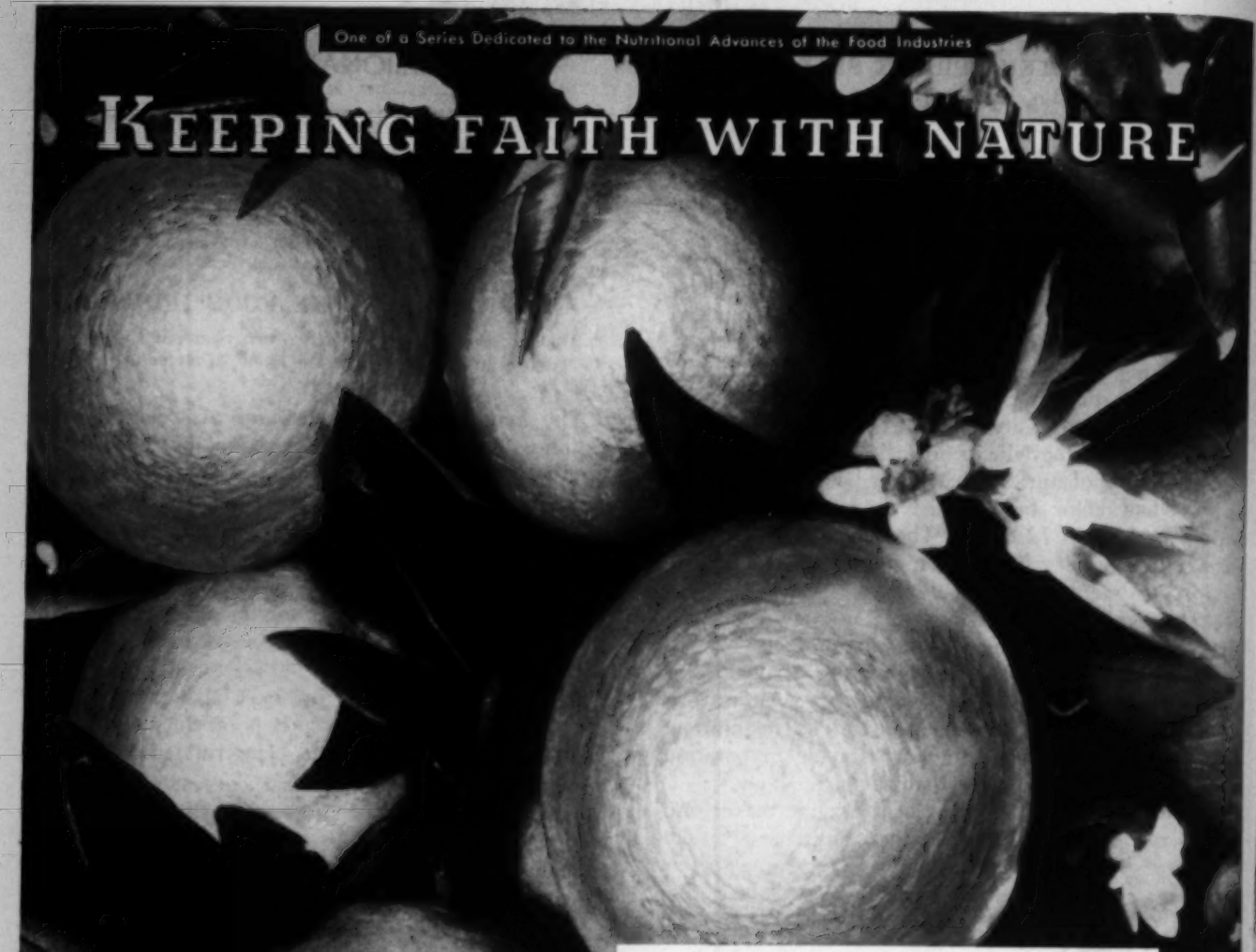

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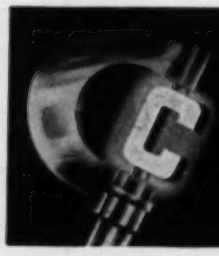

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Abstracts

(Continued from page 5 preceding technical papers)

MICROBIOLOGY

36J. Strain differences in oral lactobacilli and the relation to dental caries.

CLAPPER, W. E., AND HEATHERMAN, M. E. *J. Bact., 58,* 261-8 (1949).

A specific strain of lactobacillus is associated with dental caries. This type produces a pH of less than 5 on glucose, has active dehydrogenase for glucose, ferments saline, mannitol, and rhamnose but not raffinose, and grows rapidly in both.

37J. The electron microscopy of heated bacteria.

HEDEN, C. G., AND WYCKOFF, R. W. G. *J. Bact., 58,* 153-60 (1949).

The protoplasm of young colon bacilli becomes coarsely granular when heated for 10 min. in water at 55° C. or above. In saline, the change takes place at 40° C. and is complete at 50° C. Below this temperature, the change in texture can be reversed by allowing the bacteria to stand overnight in distilled water.

NUTRITION

38J. Milk as sole life diet.

MCCAY, C. M. *Sci. N. L., 56,* 157 (1949).

In tests performed at the New York Agricultural Experiment Station, one group of rats received a diet of cereals, meats and other normal human foods, while another group was fed only cows' milk over a two-year period. The milk was supplemented only with the trace elements manganese, iron, and copper which are lacking in milk. There was no apparent difference between the two groups, including length of life span.

39J. Comparative nutritive value of butter and vegetable fats under conditions of low environmental temperature.

ERSHOFF, B. H., PAGONES, J. N., AND DEUEL, H. J. JR. *Proc. Soc. Exptl. Biol. Med., 70,* 287-90 (1949).

Immature female rats were raised to maturity under cold room and room temperature conditions on purified rations differing only in the source of fat. The fats employed were cottonseed oil, corn oil, margarine fat, and butter fat. Gain in body weight was significantly reduced in all rats under cold room conditions. No significant difference was observed, however, either under cold room or room temperature conditions, in gain in body weight on the various diets employed.

40J. On the probable identity of several unidentified growth factors.

Arch. Biochem., 23, 326-8 (1949).

It appears highly probable that protogen, the pyruvate oxidation factor, and the acetate-replacing factor for *L. casei* are identical. It has been indicated that more than a single form of this factor occurs naturally. Unpublished data show that this factor is also one of the substances which promotes rapid growth of *Streptococcus faecalis* from small inocula in acetate-free media. In confirmation of previous data and in marked contrast to their effect on *L. casei,* concentrates of pyruvate oxidation factor and of protogen were relatively ineffective in replacing acetate for *Lactobacillus arabinosus.*

41J. Occurrence of an unidentified rat growth factor in cottonseed meal.

RUEGAMER, W. R. *Arch. Biochem., 23,* 236-8 (1949).

Hydraulic cottonseed meal contains activity for the rat growth factor. It is not certain whether this activity is due to the presence of vitamin B_{12} or to the existence of some other antithyroid substance in cottonseed meal. Nevertheless, considerable heat is produced in the preparation of hydraulic meal, and it would, therefore, appear that the factor is relatively heat stable. Experiments are now in progress to determine the effect of processing upon the content of this factor in cottonseed meal, and to ascertain the amount present in several composite samples.

42J. Animal protein factor for poultry.

JOHNSON, E. L. *Feedstuffs 21,* 37-9, Sept. 3, 1949.

In experiments at the Iowa Station, the addition of APF (animal protein factor) concentrate to a ration with plant proteins produced chicks which were equal in growth and appearance to those produced by similar rations containing animal proteins. Rations which contain corn, soybean meal, alfalfa meal, minerals and vitamins with APF concentrate during the early growing period will produce excellent chicks. In some experiments where hens were fed rations containing soybean meal as the only protein concentrate, the hatchability of the eggs decreased. Experiments also showed that by replacing part of the soybean meal with condensed fish solubles, fish meal, meat scrap, dried milk or other sources of animal protein, hatchability definitely improved. Growth has been slow and livability poor when soybean meal has been the sole protein concentrate in rations for chicks. Growth and livability were improved by adding the same animal protein feeds which improved hatchability. When there is a deficiency of the animal protein factor in the diet of hens, it shows up clearly in the chick. The egg will not contain the needed nutrients unless the hen receives a balanced ration. Livability during the early growing period is definitely affected by the amount of this animal protein factor contained in the egg. Vitamin B_{12} is definitely related to the animal protein factor. It is known to be at least a part of the animal protein factor, but preliminary research indicates the two are not identical. The greatest contribution which research and the commercial production of this factor may make to poultry feeding is in lowering the price of feed. This may result from reducing the amounts of animal proteins used, a reduction in their price or perhaps a combination of lower price and smaller amounts of animal proteins needed.

43J. The effect of the rice diet on the level of the blood pressure in essential hypertension.

LOOFBOUROW, D. G., GALBRAITH, A. L., AND PALMER, R. S. *New England J. Med., 240,* 910 (1949); *J. Am. Diet. Assn., 25,* 794-5 (1949).

This is a progress report of a study using the rice and fruit diet on clinic patients. It is hoped to determine whether this method of treatment is a practical one for use with ambulatory patients living in their normal surroundings and eating with other members of the family on a regular diet. The total number of patients instructed on the rice diet for nine months was 56. Strict adherers were 16 (28%), moderate adherers were 20 (36%); and delinquents 20 (36%). In the clinical picture, a significant drop in blood pressure occurred in 6 out of the 16 patients who adhered strictly to the diet and in the group of moderate adherers a significant drop occurred in 3 of 20 patients.

44J. Substance in potatoes may aid body to use proteins.

Sci. N. L., 56, 147 (1949).

Young rats doubled their growth rate when the non-protein nitrogenous potato substances were substituted for one-fourth of the wheat protein in their diet. In their report to the First International Congess of Biochemistry in Cambridge, England, the researchers stated that this cannot be explained on the basis of supplying essential amino acids. They believe some unknown mechanism to be involved.

45J. Exceptional nutritive value of peanut meal.

DESCARTES DE GARCIA PAULA, R. *Rev. Qulm. ind., 17,* 19-24 (1948); *C. A., 43,* 4395[e] (1949).

The chemical components of 3 typical commercial preparations of peanut flours, from which oil has been removed hydraulically, were water 10.5, 9.6, 9.72%; protein 52.06, 53.45, 57.30%; lipides 8.36, 10.48, 10.25%; sugar 7.7, 9.5, 8.7%; starch 7.6, 8.4%, ...; fiber 5.32, 4.8, 3.68%; ash 4.6, 4.11, 3.56%, vitamin

(Continued on page 10)

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Abstracts

(Continued from page 8)

B_1 500, 440, 340γ%, vitamin B_2 270, 270, 275γ% and niacin 14,500, 12,400, and 10,340γ%. The percentage component of a preparation of peanut butter was: Water 2.05, protein 29.3, lipide 46.54, starch 5.86, sugar and dextrins, 5.88, fiber 2.2, ash 2.08, NaCl 4.0, plus the vitamins B_1, B_2 and niacin in the same concentration as in the flour. The utilization of peanut flour for the enrichment of various native cereals is discussed.

46J. Relation of nutrition to infection in children.

RAWLINGS, J. M. *Am. J. Public Health, 39,* 858-60 (1949).

In a study of 315 children ages 2-17 years, 304 children had some form of chronic infection upon initial examination. They were fed supplements of vitamins A-D, B-complex and C, and in some cases iron and liver, for a minimum of 10 months. Observation and treatment showed 82.9% of the children well, very much improved, or much improved. Where tonsils and adenoids were removed, in addition to vitamin supplements, 90% of the children fell in the above 3 categories. In addition to the significant reduction in infection, there was a reduced number of infections and other retardations.

FOOD PRODUCTS

BAKERY PRODUCTS

47J. Process for compounding and treating dough for baked products.

HENNESSY, J. J. 2,478,099, Aug. 2, 1949.

A process for compounding and treating dough for baked products from an initial quantity of flour without using extraneous ingredients except water, which consists in mixing flour with a quantity of water sufficient to make a dough, washing the starch out from dough with a sufficient quantity of water to make a colloidal suspension of starch in water, hydrolizing the starch grains in suspension for improving the quality of the baked products, removing a sufficient quantity of water from suspension so that the concentrated liquid may be added to dough to make a dough of proper consistency for baking and mixing concentrated liquid with dough in order that the dough contains no extraneous ingredients not originally contained in flour except water.

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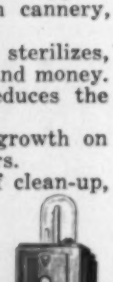

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DEHYDRATED FOODS

48J. Vacuum dehydration.

HICKMAN, K. C. *Assignor to Distillation Products,* 2,471,325, May 24, 1949.

The dehydration process which comprises exposing water containing material in a frozen state to vacuum over a substantial time interval and under such controlled conditions as to remove therefrom progressively decreasing amounts of water in the form of water vapor, progressively admixing with removed water vapors, the vapors of a normally liquid substance having the property of lowering the freezing point of water, vapors being admixed in such relative amounts as to provide progressively increasing proportions of freezing point lowering vapors in the mixture, progressively condensing admixed vapors to produce a liquid mixture of water and substance and progressively removing liquid mixture while in liquid form.

49J. Process of desiccating orange juice involving freeze drying.

FLOSDORF, E. W. *Assignor to Lyophile-Cryochem Corp.,* 2,471,677, May 31, 1949.

The process of desiccating orange juice which comprises concentrating a proportion of the juice in the liquid state, admixing the resulting concentrated product with a proportion of fresh, unconcentrated juice equal in volume to form about 10% to about 50% of the original volume of the concentrated juice, freezing the resulting admixture and removing water from the frozen product by the use of a high vacuum.

50J. Process of desiccating lemon and lime juices.

FLOSDORF, E. W. *Assignor to Lyophile-Cryochem Corp.,* 2,471,678, May 31, 1949.

In the desiccation of lemon and lime juices by sublimation of water therefrom from the frozen state, the step of adding to the juice before freezing at least about 10%, based on the juice, of a sugar, to prevent the desiccated juice from darkening on storage.

FRUIT AND FRUIT JUICE

51J. "High pressure" apple juice storage used in England.

Food Pack., 30, 29, Oct., 1949.

Seven to eight volumes of CO_2 will prevent apple juice from fermenting and growing mold. Without refrigeration this requires 120 psi equipment, with refrigeration, 60 psi is adequate.

SEA FOOD

52J. Blanching oysters booms demand.

Food Packer, 30, 29, September, 1940.

Standard steaming of oysters to open them results in high flavor losses. Hand opening is too expensive for a canning line, but a quick trip through a boiling water bath opens them with small loss.

53J. Ultra-violet rays for detecting shell in picked crab meat.

ROACH, S. W. *Fisheries Res. Bd. Canada Pac., 79,* 39, July, 1949.

Shells fluoresce in ultraviolet light, which also has bactericidal effect.

News of the Institute

CARL R. FELLERS

President, Institute Food Technologists, 1949-1950

Born in Hastings, Oswego, New York in 1893, he graduated from Mexico Academy, Mexico, New York, later spending five years at Cornell University and receiving his Ph.D. in 1918 from Rutgers. During World War I, he was 1st Lt. in the U.S. Public Health Service. In 1920 Dr. Fellers joined the old Bureau of Chemistry and Soils of the U. S. Department of Agriculture studying botulism, resigning a year later to take up work with

Carl R. Fellers

the Northwest Division of the National Canners Association relative to fish canning. From 1923 to 1926, he was Associate Professor of Food Preservation, University of Washington at Seattle, later going east to the University of Massachusetts to become Research Professor of Horticultural Manufacturers. In 1941 he became Head of the Department of Food Technology.

World War II found Dr. Fellers Post Chemical Officer at Fort Devens, Mass. He then spent 3 years in Australia and the SW Pacific where he organized 3 Quartermaster Subsistence laboratories and served as Chief of Laboratory and Inspection for the Army in the SW Pacific Theater. For his splendid war record he received the Bronze Star, Citation by the Surgeon-General and Commendation Letter. Col. Fellers now is Commanding Officer of the 1224th Organized Reserve, Research and Development Group with headquarters at Springfield, Mass.

Author of some 185 scientific papers, and several patents, he has been an Abstractor of *Chemical Abstracts* since 1926, a member of the Editorial Board of *Food Research* since 1936, technical editor of *Quick Frozen Foods* and an assistant editor of the *Journal of Milk and Food Technology*. In addition to all this and his duties at the University of Massachusetts, he is a director of the Blue Channel Corp. of Beaufort, S. C., and has been consultant for food industries.

Dr. Fellers is a Fellow of the American Public Health Assn. (Chairman, Food and Nutrition Section, 1939), and American Association Advancement of Science; member of the American Chemical Society (Chairman, Agriculture and Food Division, 1948-49), Society American Bacteriologists, American Fisheries Society, American Society Horticultural Science, New York Academy of Science, Sigma Xi (Pres., University Massachusetts Chapter, 1938), Phi Kappa Phi and Phi Lambda Upsilon.

Dr. Fellers found time in 1921 to marry Josephine Sanders, a graduate of the University of Washington. They have eight children: 5 boys and 3 girls. Dr. Fellers' avocations are gardening, fishing and tennis and spending summers at their Cape Cod home at North Eastham.

He is a Founder member of the Institute of Food Technologists, in addition to holding such jobs as Councilor, Chairman of the Northeast Regional Section, National Secretary Treasurer, 1946-1949, and now President 1949-1950.

Regional Section News

PUGET SOUND SECTION

The first meeting of the 1949-50 season was held November 10th in the new, modernistic reception room of Sick's Seattle Brewing and Malting Co. Dr. A. E. Bucholtz, Chief Chemist of Sick's, gave a short talk on brewery operation, after which there was a conducted tour through the brewery and control laboratory.

The following Chairmen of the various committees have been appointed for the 1949-50 season:

Program Committee: T. L. Swenson, Food, Chemical and Research Laboratory, Inc., 1201 East 38th St., Seattle 5, Washington.

Membership Committee: M. E. Stansby, U. S. Fish and Wildlife Service, 2725 Montlake Blvd., Seattle 2, Washington.

Publicity Committee: L. P. Callahan, Libby, McNeill and Libby, P. O. Box 1902, Seattle, Washington.

Auditing Committee: L. Newsome, Continental Can Co., 615 Orchard St., Seattle 8, Washington.

Budget Committee: A. J. King, Fisher Flouring Mills, Harbor Island, Seattle 4, Washington.

Employment Committee: M. Patashnik, Libby, McNeill and Libby, P. O. Box 1902, Seattle 11, Washington.

Other officers of the Section were given in the August issue of FOOD TECHNOLOGY.

SOUTHERN CALIFORNIA SECTION

The 63rd meeting was held in the auditorium of the home economics section of Swift and Company's Los Angeles Refinery. Mr. T. C. Bond gave a talk on the activities of the Swift and Co. Zone Laboratory in Los Angeles. A sound film: "Hidden Hunger" was shown by Mr. Bond prior to his talk.

Swift and Co. donated a Swift's Premium ham as a door prize. F. H. Hunsicker of Continental Can Co. brought home the bacon.

It was announced that the Executive Committee of the Institute had accepted the invitation of this Section to hold the 1954 Annual Meeting in Los Angeles. A chance now to compare the fog of the Bay region with the smog of Los Angeles.

The December meeting, Town Hall style, was held at the Rodger Young Auditorium. Mr. Allen E. Wahlgren of the U. S. Department of Commerce, Mr. M. J. Brown, Los Angeles Chamber of Commerce and Mr. William Border, Market Analyst were leaders in a round table discussion on "Predetermining Consumer Acceptance of New Products." Marsden Burns acted as moderator.

AMES SECTION

The name of this section has now been changed officially to "Ames Section."

The November meeting was held in the Faculty Lounge in the Memorial Union Building following a dinner in the Pine Room. Dr. George F. Stewart, Associate Director, Agricultural Experiment Station, Iowa State College, presented a brief report of the National IFT meeting in San Francisco.

Mr. George Sheehe, Agricultural representative for Iowa's Chain Stores Council, described the function of his organization in determining the marketability of the many commodities in which they have interest.

Following Mr. Sheehe's talk, Dr. Ralph Baker, Economics Department of Iowa State College, addressed the members indicating how much of the consumer's dollar is used in each marketing function.

A revised membership directory of the Section will be published in the near future.

NEW YORK SECTION

Robert S. Goodhart, M.D., Scientific Director of the National Vitamin Foundation, and Physician in Charge of the Lower East Side Nutrition Clinic of the New York City Health Department addressed the Section at the January meeting. Those who had occasion during World War II to do business in the South Agricultural Building in Washington no doubt came in contact with Dr. Goodhart who was Chief of the Industrial Feeding Section of the War Food Administration. Prior to this he was with the U. S. Public Health Service, Assistant Professor of Medicine at New York University, and Fellow at Oxford, Rockefeller Foundation. He received his M.D. at N.Y.U. and Bellevue College of Medicine in 1934.

MOHAWK VALLEY SECTION

The first meeting of the fiscal year was held October 27th at Little Falls on invitation of the Chris Hanson Laboratories. Twenty-one members enjoyed a fine turkey dinner and a discussion by Dr. Ernst Reinecke on the history of the development of rennet.

The following officers were elected:

Chairman: John Fairing.
Vice Chairman: Carl Nordgren.
Recording Secretary and Treasurer: Ruth Goodmote.
Corresponding Secretary: W. F. Phillips.

On November 28th members assembled at the Canajoharie Hotel, Canajoharie, to hear Dean Samuel Prescott, first president of the Institute, tell of "Adventuring in Food Technology," and which covered much of his own personal work in the field.

PERSONNEL

The December 1949 issue of *Citrus Leaves* states that GORDON BEISEL, formerly with Florida Citrus Canners Cooperative at Lake Wales, Florida, is now director of research of the Anaheim (California) plant of Real Gold Citrus Products.

M. S. DUNN, Professor of Chemistry, University of California at Los Angeles, has been appointed one of the associate editors of FOOD TECHNOLOGY.

R. R. FULTON, formerly Senior Fellow of the Mellon Institute of Industrial Research, Director of the Research Kitchen of Armour and Co., has been appointed Food Technologist of Magnus, Mabee and Reynard, Inc., well-known New York and Chicago essential oil house.

WILLIAM L. HALEY, Technical Director of Fisher Flouring Mills, Seattle, Washington, was presented with a Scroll of Honor for his contributions to the advancement of cereal technology in the United States, at the annual meeting of the Northwest Section of the American Association of Cereal Chemists in Tacoma, Washington. Mr. Haley was formerly president of the national organization.

CHARLES G. KING, Scientific Director, The Nutrition Foundation, Inc., New York City, has been elected a member of the Executive Board of the American Public Health Association.

JOHN R. MATCHETT, formerly coordinator of food research at Western Regional Research Laboratory of the Bureau of Agricultural and Industrial Chemistry, Albany, California, has been appointed Assistant Chief of the Bureau. Dr. Matchett is located in Washington, D. C.

GEORGE N. PULLEY, formerly Chief Chemist of Feed Products Laboratories, Inc., Lake Alfred, Florida, is now with the Polk Packing Co., Winter Haven, Florida.

FRANCES OWENS of Laucks Laboratories, Seattle, Washington, has been elected Chairman of the Pacific Northwest Section of the A.A.C.C. for 1949-50.

GEORGE P. WALTON of the Eastern Regional Research Laboratory of the Bureau of Agricultural and Industrial Chemistry, Philadelphia, Pa., is up and about again after receiving painful bruises and a shaking up when an automobile in which he was a passenger became involved in an accident last October in Washington, D. C.

NECROLOGY

GEORGE CORNELL SUPPLEE, B.S., M.S., Ph.D., president of the G. C. Supplee Laboratories, died at his home in Bainbridge, New York, on November 7, at the age of 60 years. A recognized authority in the field of dairy research, his early work was concerned with the role of trace elements in milk and milk products; he collaborated with the National Carbon Co. in developing methods of irradiating milk. In 1936 he received the A.M.A. Billings Medal for his work on riboflavin, and was awarded the Borden Award.

5 to 2

people preferred his corned beef hash WITH AC'CENT!

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